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THE PROPHYLACTIC AND CURATIVE VALUE OF THE SCIENCE OF OSTEOPATHY.

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FOR the first time in Europe and in this metropolis of the world I desire to present the claims of this new science. I appear as the apologist of the new science, because, having examined its claims, I find that they are based on scientific principles which are the common property of the medical profession. It is not unfitting that to this ancient scientific corporation the first exposition and defence of Osteopathy should be offered. Your charter rights as a Royal Society give you the privilege and honor of branding any scientific truth as genuine and to you belongs the right of disseminating it among the common people. I am encouraged by the lines of Hamlet addressed to Horatio,

“There are more things in heaven and earth
Than are dreamt of in your philosophy.”

It is something to have the privilege in these closing years of the nineteenth century to live and take part in scientific efforts and movements that promise to crown civilization with its highest glory. In the field of medicine changes are taking place unheard of in bygone generations. In other fields of literature and science artificiality is giving place to natural-ity. Accumulations that have been added to science are being unloaded and we are being led back to the simpler and more sure methods of nature. An ancient scholar has this exalted praise of the healing art, “Man in nothing comes nearer to the Gods than in giving health to his fellow mortals.”

Science is ever progressive, every new decade opening up depths and heights in the scientific field, hitherto unthought of. No science and art has been subject to so many changes as that of medicine. We use medicine in the widest sense here. Dr. Malcolm Morris, F. R. C. S., in writing on the progress of medicine during the Queen’s reign defines medicine as including, “the whole art of healing and the laws upon which this practice is based.” The science of medicine is not limited to drugs or their prescription and use, in fact the therapy of the modern University Medical College is rapidly discrediting drugs. The Encyclopoedic dictionary defines

medicine, as "a science and art directed, first to the prevention of diseases and secondly to their cure." Only a very small place in the educational program is devoted to drugs. Anatomy, physiology, pathology, symptomatology and diagnosis have found their guardians and promoters and defenders in these schools; and if we set aside pharmacology there is still left a large field of medical education.

Gradually people are realizing that there are more scientific means of curing diseases than by the use of mysterious and uncertain drug potencies. Almost instinctively people in every land seem to be turning in the same direction towards a system in which the main principle is the adjustment of the mechanism to itself and the harmonizing of its organic functions. Pain is found where a contracted muscle presses on a sensory nerve, loss of muscle function or paralysis if it presses on a motor nerve. The misplacement of a bone, ligament or muscle, the obstruction of a blood vessel calls for the mechanical skill of an operator to replace the misplacement or to remove the obstruction that in freedom the system may play normally. Nerve inactivity, fluid congestion, or the collection of diseased or germ laden fluids in the system call for the mechanical liberation of the affected parts and in this liberation lies the secret of health restoration and the removal of sickness and disease. Scientific investigators all over the world are beginning to recognize that we must take account of the structure and functions of the body in applying our therapeutics on a basis of adaptability to conditions. Dr. Willock, M. R. C. S., in calling attention to new treatments for the chest, says these methods of dealing with these diseases "have thrust drugs from the unique position that they held. They have emphasized the fact that something else other than pharmaceutical products has an important remedial action upon pathological conditions of the respiratory and circulatory systems. Of all the several systems upon whose uninterrupted functional activity the continuance of life depends, these two are those over which we have most mechanical control, and it is by mechanical means that we can obtain a considerable and important therapeutical effect in certain unhealthy states of the heart and lungs." In regard to the application of mechanical treatment he adds that in this way "the strain upon the impoverished tissue is diminished and its vitality prolonged. In addition the effect of continued movements upon elastic and muscular tissues, provided undue effort is avoided, is to develop them." Here we have the statement that mechanical movements give us an increased functional activity and an increased nutrition. If we add to this the facts that physiologically nerve stimulation may be promoted, blood and lymph circulation freed and obstructions taken out of the way by mechanical means so as to free the nerve force, the blood, the lymph and the peristaltic movements of the tissue, we have the fundamental basis of Osteopathy.

We owe a debt of untold gratitude to predecessors who have tilled the

fields of anatomy and physiology, both normal and morbid, and made it possible for us to apply the principles of Osteopathy with precision and definiteness to the human system. The principle of Osteopathy is a time honored one *similia similibus curantur*, in the sense that the only rational and scientific method of curing disease is based upon nature. Nature has won victories in other fields. In the field of education nature won a victory in discarding the old system of cramming and making education the stimulation of mental development by the skilful communication of knowledge by nature's method. Nature can do the same in the field of medicine, by removing everything that is unnatural, it can permit recourse to the perfect medicine laboratory of life, out of which the soothing draughts of nature flow to diseased parts.

Allbut in his new system of the Practice of Medicine, makes this statement, "We give drugs for two purposes; (1) to restore health directly by removing the sum of the conditions which constitute disease. Here we act empirically with no definite knowledge—often indeed with little idea of the action of our drugs; (2) to influence one or more of the several tissues and organs which are in an abnormal state so as to restore them to or toward the normal. This purpose we effect by means of the influence which the chemical properties of the drugs exert on the structure and function of the several tissues and organs. "Drug therapeutics is empirical, lacking in exactness and scientific accuracy. Recognizing that medicine is applicable in a wider field, we attempt to go to the scientific basis of therapeutics, seeking to find why an organ or tissue is in an abnormal condition, using symptoms and morbid conditions as means to the discovery of causes or at least using them as secondary causes. By a careful physical examination of the condition of the nervous and vascular supply to the local parts with the view of finding and removing any irritation or impingement in connection with these forces that supply the part, a basis is laid for correction of the condition by manipulation—this is Osteopathy.

The theory of medicine or the healing art—for I take these as synonymous—is that from a physiological standpoint it is possible to employ scientific means to preserve and prolong life, and when life is attacked or threatened by disease, accident or malpractice, then certain physiological principles may be brought into operation in connection with the body system to cure or alleviate these conditions that threaten to destroy life or to interfere with and lessen health and happiness. In all ages attempts have been made to apply measures to the human system with this end in view. Arising out of these attempts to preserve and prolong life and free it from disease, we have the medical profession which from the most remote antiquity has established its right to deal with disease, recognized its moral and legal responsibility in dealing with human life and health, and has attempted to make life more pleasureable and therefore more happy to the living and even to the dying. Custom together with the formulated laws

of different nations has given legal sanction to this profession that aims to prevent disease, to prolong life and to increase the comfort of life.

No empirical standard has ever been laid down with unerring sanction as the accredited standard of measures to be adopted to secure these ends. From a remote past magical measures and hypnotic influences in the hands of a priestly class of physicians played a most important part in this service; with the discovery of the medicinal properties of plants, minerals and certain extracts of animal tissues and organs these were employed as medicinal agents; blood-letting and blistering were resorted to in the attempt to counteract certain supposed influences at work in the body organism. Certain vibratory and massage movements were found to have a bearing on body metabolism and organic functioning and these were adopted as remedial agents. It was found by Hilton and others that the principle of rest applied to the organism or its parts, otherwise in active operation or overworked, brought to this overactive organ or hyper-functional part of the organism a new and therapeutic principle in permitting nature itself under the influence of dietetic recuperation to restore the harmony of all its parts and therefore to restore health. Others have found that heat and cold when applied to the body have an important influence in modifying circulatory and nerve conditions so that these thermal agents may be actively used in restoring towards the normal. Light has been found to have a marked therapeutic effect on the animal organism, a light of low refrangibility affecting the chemical processes and a light of high refrangibility producing mechanical changes in the organism, modifying growth and tissue tension in relation to the organic movements. The latest attempt to apply the therapeutics of nature comes in connection with Osteopathy. It may be best described as a physiologico-medical attempt to restore harmony to nature on the basis of the human organism as a perfect mechanism without external medication. Men in other fields, especially since the time of Virchow, have been led by the study of biology and physiology to regard the cell as the vital unit capable of nutrition and reproduction and on these fundamental functional basis capable of cell renewal and of forming in connection with a mass of such living cells the organism as "a summation of living unities, every one of which manifests all the characteristics of life." Side by side with this we find that nerve force, representing the function of the master tissue of the body contains within it the secret principle of trophic functional control exercised in every organism of living tissues, the minutest nerve tentacles, more especially in the sympathetic or involuntary nervous system, controlling the necessary vital processes essential to the life of the organism. In almost every laboratory in our European Universities we find men delving deep into these physiological and biological processes with the object of finding out if possible the secret of life in the cell and in the organism and to account, if possible, for all of those vital processes that take place in the renewal of the cell and organism life.

The old science of medicine represented by drugs began to fall long ago by the attacks of scepticism which always come before truth. In Moliere's plays we find an inimitable picture of one who was by nature a semi-fool turned by art into a physician. His mind as Goethe puts it "was well broken in and laced up in Spanish boots." "After many strokes of the hammer on the iron," he got his diploma. His highest recommendation being that he followed blindly the opinions of his forefathers. To-day we live in the age of freedom. In 1566 the faculty of medicine in Paris started the movement, by a unanimous decree passing this resolution, "that antimony is deleterious and to be counted among the poisons. Nor can it be amended by any other preparation so as to be taken without injury." In 1615, the same faculty unanimously interdicted drug vendors and called on all judges to deal severely with those who prescribe, administer or exhibit for sale the said medicines. Both of these acts were ratified by the French parliament and were in force for one hundred years. It was reserved, however, for Osteopathy to treat the blood not only as the means of life, the thread that welds the diverse tissues of the body into one under the guidance and control of master nerve tissue, but to regard the blood and the nerve force as the medicine of nature. It was only yesterday that we began to look on the body as a great living mechanism. In order that its vital force may be unobstructed, the different parts of the machine must operate in harmony, the skeleton must be adjusted to every motion of bone, ligament and muscle; pure air must penetrate every minute cell of an unimpeded lung and every minute recess of healthy tissue; pure blood must circulate in every organ and tissue and a perfect nerve substance with an irrepressible organic force must animate every tissue and pass through every region of the body. To see that this is the condition of the body is the function of Osteopathy.

Osteopathy claims that to administer inorganic drugs internally is harmful to the system. In this, it is supported by some of the most eminent physicians who represent the tendency of anti-drug therapy. The illustrious Hilton, of world reputation, the author of "Rest and Pain," advocated the now celebrated rest cure. Among others we find Dr. Keith in his "Plea for a simpler life" and "Fads of an old physician", vigorously defending the same principle and in a few of his scattered references anticipates Osteopathic treatment, especially in connection with *angina pectoris*. The celebrated manual treatment of Ling has many features that are suggestive of Osteopathic therapeutics. Dr. Wm. Osler, throughout his splendid work on the "practice of medicine" discountenances the use of drugs as unavailing and insufficient therapeutically, reaching the climax, when in speaking of the causes of diseases, he specifies "that most injurious of all habits, drug-taking" as one of the almost constant causes of disease. Dr. Lauder Brunton, of St. Bartholemew's Hospital, London, makes this statement in connection with headache that is Osteopathic in principle,

when he says that there is "in migraine a dilatation of the proximal parts of the carotid artery with a contraction of the peripheral part, and that if I take off the strain from the vessels by pressing the carotid the pain is at once relieved." Osteopathy takes up the principles enunciated by such men as these found scattered over the field of medicine, carrying to their logical conclusion the principles that underly their work, namely, that mechanico-therapeutic measures if systematically and physiologically applied may form the basis of the prevention and cure of diseases. Medical science is now passing from infancy to manhood, gathering up the copious generalizations of past history so as to subject them to the inductive examination necessary to their testing. Osteopathically we are attempting to reduce an art to science. This represents the modern spirit of scientific research, in virtue of which we hope to raise out of the dead dogmatisms of the past, the new science in connection with clinical work in the hospital and scientific work in the laboratory.

Here we find the starting point of what we believe will certainly revolutionize the field of medicine. The field of Osteopathy is very wide, taking in the entire therapeutics of disease, both bodily and mental. It began by demonstrating its therapeutic value in the case of alleged incurable conditions. It has branched out in every direction until to day it covers the whole field of medicine. Osteopathy was first formulated by Dr. A. T. Still, in 1874. His own account of it gives us the initial point of view from which he looked at it. He claimed "that a natural flow of blood is health; that disease is the effect of local or general disturbance of the blood; that to excite the nerves causes the muscles to contract and compress the venous flow of blood to the heart and that the bones could be used as levers to relieve pressure on nerves, veins and arteries." He conceived the idea that the human system is a machine, perfectly framed by its maker and, if kept in a condition of proper adjustment, it is capable of surviving for a long time. He found that manipulation could be made, almost at will, in connection with the skeletal structure, with the result that all the organs could be stimulated to perform their normal functions. Out of this beginning there has been developed a system of manipulative therapy aiming at rectifying all the abnormal structural and functional disorders of the system.

While Osteopathy repudiates drugs it claims to be the heir of all that is scientific in the past history of medicine. Its principles have lain buried beneath the massive literature of all other systems of healing and have been used at times in the combat against disease; but the fundamental principles have never yet been fully systematized with a view to their application from a prophylactic and curative standpoint. While it is in the main dependent on scientific manipulations, it is not exclusively the science and art of manipulation. It takes in and uses all the therapeutic principles that have been tested from the standpoint of nature, including

the mechanical correction of misplaced tissues, bones, etc.; the use of proper hygienic and dietetic principles, and, in fact, any principle that is in line with the natural laws of the human body. Osteopathy differs essentially from all other systems in its account of the etiology of diseases and in the curative principles utilized. From an etiological standpoint diseases are found to be very often due to structural derangements in the anatomy of the body, whether these are found in the osseous, muscular or neural systems. Here Osteopathy claims to have stepped ahead of the rest of the medical profession. Medicine has been very largely occupied in discussing and exploring the field of drug action upon the tissues and organs, forgetful of the fact that the chemicals of life lie hidden in the laboratory of human nature. Osteopathy claims that in substituting the laboratory of human nature for the laboratory of the chemist and experimental physiologist, it is getting closer to human nature and applying more scientifically, anatomical, physiological and chemical principles. We are not trying to undermine the therapeutics of the older schools, but rather, from a humanitarian standpoint, to substitute what we consider a more rational system of healing. From this standpoint, if every tissue of the body anatomically and functionally is correct health must of necessity result. Hence from an Osteopathic standpoint any displacement of any of the tissues of the body may result and if continued must result in an abnormal condition. This applies to muscle, bone, ligament, tendon, nerve tissue, etc. How do these changes in the form of displacement arise? It is easy to understand how a strain, over-exertion, a fall or any ordinary external or atmospheric change may so affect the tissues as to produce displacement, to cause contraction, strain or dilatation of the structural form of the tissues so as to interfere with the proper flow of the fluids and forces of the organism, thereby producing an abnormal distribution of these fluids and forces. These fluids and forces represent essentially, from a biological standpoint, the vital and vitalizing principles and forces of the organism. It is easy to understand how changes in air, whether moist or hot, drafts, excessive exposure to sun, rain, wind, etc., may modify the muscles and other tissues of the body. In his tissue modification, involving contracture, there is necessarily an interference with the superficial blood supply and tension of the superficial nerve fibers; if this contracture becomes excessive there is a strain on the muscles in their attachments, traction brought to bear on the bones and tendons, with the result that spinal articulation, vertebral and rib connection become abnormal. In this condition there is a decided interference with the muscular and nervous substance so that nerve force and fluid supply become pathological. The same conditions are found to be produced by the mischances of daily life, a strain, an undue twist of the body, a slip or fall, or perhaps the attempt to evade such a slip or fall—any of these exerts an influence on the tissues, tending to displace the tissue structures and also interfering with the nerve force and fluid supply to

the parts. Often a vigorous nature and native strength of body are able to rectify these conditions; but often nature is weak and cannot of itself restore to the normal. Here Osteopathy steps in to assist nature by so manipulating the body as to correct these wrong conditions.

Osteopathy does not ignore the fact that there are many indirect causes that may be classified under the head of predisposing causes, distinguished from the direct causes of disease or diseased conditions. Heredity, environment, especially from a sanitary and hygienic standpoint, bacilli of multiform variety, infected germs come into play in producing disturbances of function and causing disorder in the tissues of the body locally or generally. Osteopathy claims that often behind these is to be found the real cause of the disease, these secondary conditions simply furnishing the means or medium for the action of a perverted function and therefore involving a derangement of the tissue.

When these conditions are found the question arises, how can they be removed? Wherever there is a structural change, a disordered function or derangement of tissue it would seem natural to suggest the correction of the lesion. The surgeon when he finds a dislocated joint or a broken bone uses his mechanical skill in setting the joint and the bone. If a rib is displaced or a vertebra out of its normal position, if a muscle is contracted, involving impingement upon the blood and lymph circulation and on the action of nerve force, why not mechanically use the surgical science in setting right these abnormal conditions? Here lies the secret of Osteopathy—it is the medical-surgical, not the medical and surgical, system. That these structural disorders affect the internal organs of the body cannot be doubted from the fact that osteopathically, the first fundamental principle of therapeutics is, when diagnosis has revealed such a structural lesion, to remove the lesion or correct the displacement, whether of bone, cartilage, ligament or muscle. Following this, the second principle is, to attend to the general health of the patient by general manipulation of the body tissues, so as to promote free circulation, along with attendance to correct hygienic and dietetic rules. When the disorder has been removed then the blood has free circulation and the nerve force free channels for action. This pressure upon the nerve fiber or blood vessel may occur at any point in the skeletal structure and the effect may be either direct or reflex; in the former case the effects may be expected near to the point of impingement; in the latter case they will likely be found at a distant part of the body or in distant organs affected reflexly. This is one reason why the spine and the ribs represent in Osteopathy the most important parts of the skeleton, because lesions among the vertebrae or ribs affect very seriously those organic centers in the spinal cord, the medulla and the brain at the basis of life; and involve interference with the action of those trophic influences that pass from the spine to the sympathetic ganglia and nerves that supply functional activity to the organs of

the thoracic and abdominal regions. Osteopathy aims to correct rib or vertebral displacements, to correct tissue contracture or displacement so that when the tissues and bones are restored to their normal position and function nature may resume its normal activity. In the removing of these obstructions, irritations and hindrances to free activity lies the great secret of Osteopathic success.

Osteopathy is based on accurate knowledge of the anatomical structure and physiological functions of the body organism. Nature has placed within the body certain vital forces, vitalized fluids and vitalizing processes and activities which in harmonious accord with one another maintain the equilibrium of the body mechanism; any disturbance of these forces, fluids or processes and any interference with their activity, circulation or distribution involves the absence of harmony and interference with the body order. Osteopathic manipulations aim to restore these to their normal condition, so that the body may regain its normal functional equilibrium and form. In this way Osteopathy claims that life is revitalized and strengthened by vital forces, vitalizing fluids and processes, disease being removed or overborne by getting rid of an abnormal structural alignment that produces disharmony in the body and prevents normal functional activity.

Technically Osteopathy represents that branch of the science of medicine in diagnosis and therapeutics which is built upon an exact and comprehensive knowledge of the structure of the human body, of its chemical basis and the chemical constitution of its fluids and secretions; of the physical and physiological principles that regulate the body activities, of movement, locomotion, nutrition, vasculature, respiration, muscle, nerve and glandular action; in the elaborate synthesis within the organism of those vital principles at the basis of organic life, so that any deviation from the normal in the form of misplacement, derangement or incoordination may be easily discovered and scientifically restored by mechanical operation.

It starts with the assumption that the body is a perfect mechanism, consisting of many parts, essentially of two that we call body and mind, the active and harmonious operation of all the parts in the perfect mechanism constituting health. This perfect mechanism represents the sum as well as the climax of all being, so that every lower organism or form of existence is subservient to and in the main contributory to the upbuilding and development of this masterpiece of nature and God. A healthy body consists of the proper play and correct relation of all the integral parts of the organism, including the correct articulation of the entire skeleton, the proper relations of the muscles, ligaments, cartilages and tendons to one another and to their skeletal attachments, the exact anatomical structure and physiological action of the blood vessels and the nerves of the body organism, so that all of these in interdependence upon one another and in

correlation to the organism as a whole, form the basis of the vital force of the body.

We hold that there is a trophic influence originating in connection with the cerebro-spinal fluid secreted in the brain, emanating from the brain along the spinal canal and the pathways of all the cranial nerves to be distributed in every part of the organism peripherally, so that when the trophic influence reaches the different organs and tissues of the body it is capable of selecting appropriate nutriment from the blood and in conjunction with vitalized nerve force applying them to the nutrition of the local parts. This cerebro-spinal fluid also exerts a lubricating and anti-septic influence upon the nerve tissue and the other body tissues in which it is distributed that renders those parts normally immune to diseases and when subject to disease is restorative to the normal. In the blood forming glands of the body we find the basis of a blood formation that is adapted to the body as a whole and its local parts, so that the blood carries with it the nutrient matters and oxygen suitable to every organ and tissue of the body. When the proper nerve force is exerted this suitable substance is selected and by a secretory process is separated from the blood to be applied locally to the different tissues of the body. In these trophic, selective and secretory processes lies the secret of healthy blood, well nourished tissue and active metabolism of the tissues, which forms the true basis of a healthy body. When the muscles of the body are kept in proper tone, when the skeleton and its attachments are kept free from abnormalities, when the cerebro-spinal, cranial and sympathetic nervous systems are kept in free trophic and nutritive operation, when the supply of blood and lymph throughout the body is preserved in normal equilibrium, then the body is healthy. Any obstruction, interference or mal-alignment will produce an unhealthy condition of the organism, because of an interruption of the physiological processes or an interference of some kind with the physiological supplies that are necessary to the nutriment of every local part.

The essential basis of any therapeutic effect upon the body organism, whether produced by drugs as in the old school of medicine or by mechanical, thermal or electrical stimulation as in the case of the new school of medicine, is that the effect must be produced through a nutritive channel or by nutritive processes. Disease in other words involves mal-nutrition. The two main physiological functions controlling the nutritive processes are, (1) the nervous supply, and (2) the vascular supply. Both of these must be made the channels of stimulating in order to produce effects upon the organism, otherwise an imperfect result is gained. Here lies the special value of the newer method of mechanical stimulation over the older method of drug stimulation. Chemical stimulation draws forth energy without supplying a new stock of energy, if the chemical stimulation takes place on an inorganic basis, that is, by the use of drugs; if it takes place on an organic basis, then the chemical organic substances are food and as

such supply materials for the nutritive processes. Stimulation on a mechanical basis has not only a stimulating effect but also a replenishing effect, nerve stimulation and blood stimulation furnishing materials in nutrient matters and nerve force for new energy.

Any manipulative effect to be physiological, must be nutritive in its basis. To accomplish this, there must be the balance of the nerve force, represented either by the cerebro-spinal system or the sympathetic system, and the blood. This may be illustrated in connection with the production of an effect upon the heart. In affecting the heart we can reach its activity through two channels in the two systems; (1) in the cerebro-spinal system through the pneumogastric, a direct reflex being established with the heart through the inhibitory function of the pneumogastric, and also through the depressor nerve, an indirect result being established through the vaso-motor system in the peripheral parts of the body in connection with the blood supply. In the former case we have an effect through the continuously acting vagus action, and in the latter case through the emergency function of the depressor nerve modifying blood pressure so as to relieve the heart when in a condition of strain. (2) In the sympathetic system through the cervical sympathetic, a direct reflex being established by way of the pneumogastric, and also through the splanchnics an indirect result being attained through the vaso-motor effect on the peripheral blood supply. This is simply an illustration of what may be stated of every part of the body, that the nutrition, rhythm and functional activity are carried on from two standpoints, that of direct nerve force and indirect nerve force through the blood supply, the meeting of these two under normal conditions producing trophicity, tonicity, and functional activity. Both nerve force and blood supply are therefore under the control of manipulative operations of a mechanical nature and here is the basis of our treatment of diseases operatively. Tonicity, for example, depends upon rhythm and rhythm depends upon the antagonism of opposing elements or factors in the tissue vitality, such as the cerebro-spinal and sympathetic systems, or the nervous system and the blood, or the two kinds of muscle as in the cardiac tissue substance. The tonic condition of any tissue of the body depends upon these opposing elements meeting in the tissue substance and keeping up the struggle for existence in these tissues of the body. Mechanical therapeutics, therefore, is based upon these physical and physiological principles which are capable of stimulating the vibratory, molecular, electrical and chemical changes that take place in connection with the two main elements of vitalized tissue, the nerve force and the materials of the blood distributed under nerve direction in connection with the selecting power of the trophic system. The stimulation of these processes can be accomplished most physiologically, without any foreign inorganic substances, by mechanical manipulation.

The body is not only a perfect mechanism; it is also the most wonder-

ful chemical laboratory that exists anywhere in the universe. In this laboratory are generated acids, alkalies and all the fluids necessary to wash away accumulations of waste or impurity. Every day and every moment of our lives the most wonderful chemical results, analytical and synthetic, are taking place and these form the basis of those normal changes that keep the body in a condition of order. When these substances thus formed are distributed by the channels of the blood and lymph under the direction of the nerve force to all parts of the body we have the secret of life. The vital powers of the body are capable of dissolving all the constituent elements of the body from the blood to bone and the functional action of the body and its parts is capable of modifying nerve, muscle, ligament and bone. If a quantity of blood is thrown out by means of rupture, the result is a tumorous condition, resulting in the temporary suspension of vital activity. Such deposits are capable of being removed by nature. There are such solvents within the body on an acid and alkaline basis capable of disintegrating the most solid formations of the body, osseous or fibrous. In the body chemical laboratory this continual process of compounding, reducing and forming substances of all chemical varieties is going on capable of dissolving the most solid substances so as to prepare the way for the upbuilding processes. In this renovation process the first essential condition is to rectify any misplacement of the osseous, muscular or ligamentous parts of the body that may be interfering with the nerve, blood and lymph activity, not only to give free space and action to the nerves and blood vessels in communicating the elements of life and activity but also by a free supply of lymph to wash out the impurities, cleansing the congested parts, so as to prepare for the renovation process. If the lymph is thrown into a space where blood has been held in congestion, the blackness of the local part will soon disappear and by absorption there will be a removal of the substances causing the congestion. Hence in the manipulation of the bones, muscles, etc., the object is primarily to give free play to the circulating fluids, with the object of dissolving and removing waste matters, if such are present; secondarily, to furnish a free supply of those substances that are borne upon and in the fluids, especially of an albuminous nature, that are necessary for the renewal of depleted or degenerated parts. In addition to this, the scientific manipulations are designed, even where no marked abnormal condition of bone, muscle or ligament is noticeable, to throw in the chemical supplies of the body life where they are demanded, so that nature may be assisted in the renovation by being furnished with such substances as are necessary in these processes. The Osteopathic theory is essentially based on the idea that this process is twofold and that it takes place naturally without any foreign drug medication, (1) the stimulation of the production or compounding of the substances that are needed by the body or by its parts; and (2) the manipulation of the parts of the body in such a

way that these substances thus prepared by nature may be brought to the parts demanding them most, so as to remove all hindrances to health and supply all that is necessary to normal vitality. For example, when we find renal or bladder disorders there is usually found clinically some tenderness in the renal area around the spine. This leads to an exploration of this area to find out any abnormal variations, involving disturbance or displacement in the renal nerves, or else something in the spinal articulation involving pressure or interference with the trophicity of the organs. It is universally recognized that the lesions in cases of ataxia are not caused by a primary sclerosis of the neuroglia, the degeneration beginning in the prolongations of the posterior nerve roots in the spinal cord. According to the commonly accepted theory the degeneration is due to the cutting off of the nutritive action of the posterior ganglion by some pressure on the nerve fibers at the point of entrance into the spinal cord. Under normal conditions these fibers are constricted at this point of entrance, and it is easy to see how an obstruction like a meningeal thickening and induration, involving vascularity and nutrition at this local point would result in the degeneration of the intra-spinal fibers. Manipulation in this case would be designed to remove the local pressure and restore the nutritive continuity of the nerve fibers in the spinal cord.

What is true of one small part of the body may be true of the body as a whole, all the different parts of the body being united in the most sympathetic relations. Every organ and every part of the body seems to be at least sub-conscious that it forms a part of a mighty [whole. If any part should fail, it is the law of animal life, that all the parts suffer together, because from the great brain source of conscious and sub-conscious power to the minutest nerve filament in the most distant part of the body there is an inseparable relation of structure, function and vital activity, forming the mainspring of life. Man cannot be in perfect health if the minutest nerve fiber to an eyelid is subjected to irritation. The same law holds good of every part of the body. Hence whenever and wherever these minutest variations from the normal are found there is disease in its true and substantial etiology; and here is found a fertile source of mal-nutrition, irritation and degeneration that produces so many of the symptoms of a pathological condition.

On this basis the Osteopathic diagnosis is reduced to the discovery or attempted discovery of the cause or causes of a disease. Diagnostic conditions may be summarized under three heads; (1) misplacements of bone, cartilage, ligament, muscle, membrane or organs of the body; (2) disturbances in the fluids of the organism, including the blood, the lymph and other secretions of the body; and (3) disorders or derangements by tension, impingement, thickening, induration, etc., of the nervous system, including its centers, ganglia, plexuses and fibers. Following up this line of physiological thought the Osteopathic therapeutics is simplified and will

consist of the correction or the removal of the cause or causes of disease. Corresponding with the diagnostic points, we find, (1) scientific manipulations that aim to correct displacements in the bony and other tissue structures of the body, in its membranes or organs; (2) scientific manipulations that are designed to rectify the disturbances in the circulation of the body fluids and to restore them to their normal condition, especially blood conditions and defects in the blood circulation and distribution; and (3) scientific manipulations that utilize the nervous system with its fibers, ganglia and centers with the view of correcting the nervous disorders, toning up the general system or its local parts, promoting trophic conditions of the nerves and muscles and stimulating a normal correlation of the psychic with the physiological and vegetative functions of the human system.

The entire body is for functional activity; hence there is nothing waste or superfluous and no room in the body for any abnormal condition. Hence the slightest deviation from the normal structure involves some interference with organic action and may give rise to untold mischief in the neural or muscular systems. Theoretically, Osteopathy has for its ideal a body whose bone framework is perfectly fitted and delicately set, whose muscles are carefully attached in their origin and insertion, whose blood is freely circulated in every part of every organ and tissue and whose nerve force is the assimilating and life-giving principle in the entire body. There is a physiological sympathy between all the different parts of the body and this sympathy is based upon nerve force. The laws of neural energy furnish the principles on which this uninterrupted sympathy may be preserved and at the same time they explain all possible deviations from the health standard. In harmony with these laws order must be restored to the system.

The basic principle is that if the body organism is in perfect health, every body tissue and structure performs its part without interruption, the body structure representing the framework upon which the other tissues of the body are built and to which they are attached. Hence the bone framework is used in establishing landmarks for physical examination and as a means of restoring misplaced parts of the body. The bones become the basis for operative manipulation, so that manipulation represents the medium of the therapeutic operation in removing pressure, in producing stimulation and inhibition in connection with the nerves and their centers. One of its fundamental principles is that for the body, whether in health or sickness, no extraneous medication is necessary, outside of that natural dieting suggested by experience as essential for the sustenance as well as the repair of existing tissues and for the creation of new tissue in connection with the general disintegration and dissolution of the body bioplasm. Dietetics represents the essential nutritive basis of a healthy and vigorous system. Good food in sufficient quantity, not to excess, and sufficiently varied, together with muscular exercise and normal respiration represent the true culinary and gymnastic theories.

The essential principles of Osteopathy may be set down thus, (1) health is natural; disease and death between the time of birth and old age are unnatural; (2) all bodily disorders are the result of mechanical obstruction to free circulation of the vital fluids and forces, and the continuity of nerve force (3) The impediments in the way of free fluid circulation and uninterrupted nerve force are found in osseous displacements, contracted muscles, ruptured ligaments, constricted or dilated vessels, hypertrophied tissue substance or congested conditions of the tissues. (4) These abnormal conditions represent not only the change in structure or function on the part of particular portions of the organism but also produce physiological disorganization of the vital forces of the body, producing an irritable condition either of overstimulation, understimulation or inhibition resulting in excessive activity, partial activity or inactivity of the vital forces and processes. (5) In the restoration to the normal the main purpose in operative manipulation is to co-ordinate the vital forces, to restore harmony in the vital functions and thus aid nature in the elimination and checking of diseased conditions. In diagnosis based upon accurate knowledge of the structure and functions and activities of the tissues and organs of the body, the condition of disturbance is traced to its primary cause through or by the aid of symptoms and secondary conditions; in the organic regional areas of the spinal cord, in the regional plexuses and sympathetic ganglia secondary organic centers are localized in dependence upon the great primary centers of vitality and vital force in the brain, the manipulation aiming at reaching those centers of organic activity, trophic action and regional control that are affected by the disharmony of function, the modification of structure and the disorganization of the vital forces, to restore them to normal activity.

Osteopathic manipulation has passed beyond the experimental stage. It is now a demonstrated system of healing. It gains results because it uses and aids nature. All nature is pregnant with force and nature's force is the most remedial because it is natural. The powers of the body are all self restorative to such an extent that what is necessary is, not massage or drug medication or any kind of artificial treatment, but simply the utilization of what lies hidden in the laboratory of life. In this way and on this basis assimilation is possible without alienation, so that remedial measures can be adopted that are native to the organism, with the subtle force of vitality and without any of the harmful properties of foreign substances. The name Osteopathy was applied to the new science on account of the fact that the displacement of bones occupied the first place in the category of causes or lesions producing diseased conditions. Like every other name given to a new science it does not cover all that the new science embraces, but simply indicates the germin point from which the new science started, as a science of diagnosis and therapy as well as an art of diagnosis and therapy. The underlying factor is that of body order and

physics developed in connection with animal mechanics. Orthopœdic surgery and Orthopraxy have emphasized the mechanical principle in the treatment of deformities, debilities and deficiencies of the human body. Massage has also emphasized the mechanical method of general rubbing and kneading. Osteopathy attempts to specialize the mechanical principle in dealing with all kinds of curable diseases, acute as well as chronic, graduating pressure, tension, vibration and all the mechanical forms of physical stimulation in its application to muscles, bones, blood vessels, nerves and organs of the body so as to gain therapeutic effects. This is the technique of Osteopathy. For example, spinal irregularities involving curvatures or separations of the vertebrae throw out of line the vertebral spinous processes and produce impingement upon the nerves as they emerge from the spinal cord. In removing these irregularities mechanically by manipulation the nerve force is liberated from pressure and thus the suffering part of the body supplied by these nerves is relieved by relieving the osseous irregularity. The anatomical order of the body is also dependent upon the osseous framework, so that in the adjustment of the framework the body tension producing body pain is relieved; and this relief is brought to the system by using the bones as mechanical appliances to remove tension and to produce the stimulation necessary to the stimulation or inhibition of the nerve centers.

Osteopathy repudiates drugs as foreign to the organism. The attempt to furnish an inorganic something to an organic being is regarded, not only as unnecessary, but as actually harmful to the organism. This arises from the fact that nature has provided a well stored laboratory within the organism itself, consisting of processes, forces, functions, structural and physiological relations as well as organic chemical compounds which are sufficient to meet all probable causes of disease. For example, in chlorotic anaemia it is a well recognized fact that the disease is not produced by an under supply of iron but from physiological inability to utilize the amount of iron stored in the liver and thrown off in the form of waste matter. Osler says, "iron is present in the faeces of chlorotic patients before they are placed upon any treatment, so that the disease does not result from any deficiency of available iron in the food." To remedy this condition the administration of inorganic iron is not only superfluous, but injurious, because it will increase the amount of waste thrown off through the excretory system and therefore increase the secretory function to an excessive degree. Bunge claims that sulphur prevents the assimilation of this organic iron found in the food, the sulphides produced by fermentation retarding the assimilation. The administration of inorganic iron is said to promote a combination of the sulphides with this iron so as to permit the normal organic iron to combine with the hemoglobin substance. This is simply a theory and it lacks demonstration. Clinical experience has demonstrated that the correct way to remedy the condition in

which the iron is not used by the system but thrown off as waste is to remedy the defective nutritive condition. This can be done, not by increasing the amount of inorganic iron, but by promoting those physiological processes that are necessary to blood formation in connection with the assimilation of iron in organic form to the newly formed or combined hemoglobin of the red blood corpuscles, thereby preventing the iron that is accumulating in the system from being wasted.

In the case of febrile conditions, in connection with the vaso-motor system and the temperature nervous system of centers and nerves it is possible to reduce the febrile temperature and keep it within bounds, use being made of the nerve force and the blood supply through vaso-motion. More particularly through the vaso-motor system is it possible to keep up the circulation of fresh and nutritious blood so as to check the ravages of the micro-organic germs to such an extent as to promote phagocytosis by stimulating the white blood corpuscles to activity in the destruction of the micro-organisms that are rendered lethargic by the febrile temperature and the free supply of fresh blood, or by the production of chemical compounds that destroy the germs. This renders unnecessary the injection of serum on the basis of modern serum-therapy, because by the manipulation of the blood and lymph in connection with the nervous system in the individual affected the leucocytes can be stimulated to such activity as to eat up the germs and thereby produce in the system a serum that will render the body immune from the action of these disease germs. In pulmonary affections it may be demonstrated that tuberculosis is a disease at least associated with the nervous system, the normal trophic influences being cut off in some way from the pulmonary system so that the pulmonary system becomes a prey to the devastating action of the germs of tuberculosis. Hence the contracted thoracic conditions so often associated with phthisis or the vagus interference found in connection with the vertebral displacements, or pressure upon the vagus in the upper thoracic region. The lungs represent the seat of many forms of pulmonary diseases that have wrought havoc among humanity. The condition may be one of simple congestion, of bronchial inflammation or of pneumonic infiltration of the pulmonary substance. All these inflammatory conditions are caused by an interference with the blood flow dependent on contracted conditions of the muscles of the thorax, the displacement of ribs or the induration of the spinal muscles in the thoracic region of the spine, producing excessive stimulation or inhibition of the pulmonary nerves. These mechanical causes interfere with normal respiratory actions, preventing the inspiration of a sufficient amount of pure oxygen and the expiration of the necessary amount of carbon dioxide, as well as cutting off the trophic influence from the pulmonary tissue. To remove these causes manipulation of the thoracic and spinal muscles is resorted to in order to remove the contracture, the rib depression is rectified, inhi-

bition is brought to bear upon the spinal nerves that branch out from the spinal cord along the upper half of the dorsal region to regulate the vaso-motor action and stimulate pneumogastric action in connection with lung trophicity.

Headache almost invariably involves a pressure upon the cranial nerves, a displaced atlas or axis or vertebral displacement of some kind in the upper cervical region of the cord producing pressure. Asthmatic conditions are usually found in connection with contracted and confined thoracic conditions, interfering with the action and supply of the nervous system to the lungs and thereby preventing the normal respiratory action which requires the action of muscles and nerves and the thoracic enlargements of the chest produced by the raising, expansion and rotation of the ribs and the rib attachments, together with the diaphragm.

Drug therapeutics bases its *materia medica* on pathology, symptomatology and pharmacology in their relation to chemistry, physics and physiology. The application of pharmacology is essentially empirical and alien to the body system. Osteopathic therapeutics bases its *materia medica* upon the chemical, physical and vital or physiological functional principles of the normal body organism, in comparison with the abnormal functional action of the same principles from a pathological standpoint; so that while health represents normal functional action, disease represents abnormal functional action of the organism or its cells. Hence while drug therapy uses internally or externally inorganic remedies, Osteopathic therapy represents applied functional biology and physiology and applied anatomy on the basis of applied mechanical physics and chemistry.

Osteopathy claims a prophylactic as well as a curative value. If Osteopathy is correct physiologically, and everything depends on physiological demonstration, then the Osteopathic practitioner should be in the best sense a family physician. His place in society is to attend to the family so that in the nurture of children the skeletal structure and physiological function of the organs of the body may be corrected at every mischance and kept in a correct condition. A child may be born with a misplaced anatomical structure or perverted physiological functions. In childbirth these misplacements may be produced and if a child is to survive the operation of birth or to live a happy life in the future these must be attended to in childhood. These childhood conditions account for much of the unhappiness and misery of later years and give rise to many of the diseases that end in death before adulthood is reached.

Osteopathy lays it down as a necessary principle that health is natural, disease and death unnatural between childhood and senility. To demonstrate this the Osteopath asks a field and a fair and even chance to show that this contention is correct physiologically. He asks the privilege of applying, subject to the law, the principles of physiological medicine. He is not a christian scientist and has nothing akin to the mind healer. He be-

lieves in mind as the dominant factor in life, mind representing the master element in connection with the body organism; but he does not believe that in mind healing can be found a panacea for all the ills that afflict humanity. The diseases that affect the body are no ghosts with phantomlike appearance. That they are too real to require a demonstration is evident from the fact that Osteopathic symptomatology is based entirely upon structural and functional malalignment. Even in the case of mental diseases we find that they are associated with the same or similar anatomical and physiological maladjustments, displacements or hypertrophic conditions so that even insanity is subject to correction when these abnormal conditions are removed.

Physiology explains and largely accounts for psychological conditions, for true psychology is founded on physiology. The mental states and activities are of value only as they are illustrations and manifestations of physiological relations and conditions. The psychic conditions of life are brought out in the study and diagnosis of mental diseases and in many of the nervous diseases. The physiology of the brain, the spinal cord and the entire nervous system is at the foundation of every true theory of life, whether we take it as physical life, in its preservation, prolongation and its treatment under diseased conditions; or in regard to mental life, normal or abnormal, or even the higher moral and spiritual life. If physiology is taught in all its bearings it gives us the functions of a differentiated human life consisting of a number of organs all of which are independent and yet united together to form in unison and harmonious activity a single life. As we step into the higher field of psycho-physiology we find that mind is the ascendant power and that in a healthy physiological life nothing less than a healthy mind can secure that vigorous condition of body necessary to health and happiness. While we treat what seems to be purely bodily diseases we must remember that the field of mental diseases is also opened up and that these mental conditions of unhealth must be removed before the cure of body disease is possible. It is probable that every active operation of the nervous system affects the whole human organism, so that there must be a constant activity on the part of the nerve cells, accompanied by continued impulses entering and leaving those cells. This forms the basis of the continuity of conscious experience. Thus to each man is given by birth, not only a body, but also a mind, the basis of mental character and development. When man starts out from this initial point his development is determined largely by environing conditions and educative processes. Even the power of volition is increased by culture, so that the inhibitory influence depends largely on educative influences. These educative influences pass through the nervous system, especially in connection with the education of the central nervous system.

Mental development, therefore, for good or ill, for health or disease of mind, depends on those educative influences under the control of physio-

logical nerve tissue. Here lies the basis of Osteopathic work in mental diseases. The same, or at least analogous causes, that produce bodily diseases, may produce mental diseases by involving an interference with that neural mechanism that is the essential physiological basis of mind and mental activity. Consciousness is not the product of the changes that take place in the cells, because even a knowledge of all the internal changes would not give us consciousness. Some have identified energy of some kind with the causation of consciousness. But energy is a physical attribute in virtue of which certain matter or matters possess the power of acting, this action depending on the active changes taking place in the constituent elements. If we consider the nervous system as consisting of a complexity of nervous mechanisms, each mechanism in its simple form constituting an activity in which there is consciousness, then the entire nervous system would represent a complex series of conscious states from the psychic standpoint. Consciousness must exist, therefore, not only in the case of the entire brain but in the case of all the cells that constitute the brain. Here lies the basis of memory and recollection, the impulses passing to the nerve cells in the brain where on account of their strength they make a vivid impression upon the cells, so that when the stimulation has passed away the impression continues subject to recall. By the constant repetition of these processes the impressions become so closely associated with the cell body that they form an inherent part of the cell life; so that by heredity these are transmitted from generation to generation forming the physiological basis of mental intuitions. These intuitions represent modifications of the brain under the influence of mental development in connection with environment, each brain representing its own stage of progress in evolution. Where we have a great number and variety of impressions we find great variation in the cell changes and a corresponding variety in the mental phenomena. When these impressions are so fixed in the brain cells that stimuli from another part of the brain can call forth a response, we have a fully developed mental condition. Mental development implies the receptive condition of the nerve cells and also the active operation of these cells in the changes involved in molecular development. These are regulated somewhat by the capacity of selection in the case of different impressions by the concentration upon particular impressions to the exclusion of others, by the activity of the cells in connection with particular impressions and the power of associating these impressions. Each of these elements has a physiological basis in the central nervous system, the brain development and mental culture depending largely upon proper nutrition, proper exercise and correct adjustment of all its parts on the basis of neural stability. Individuals differ from one another in the original structure and constitution of the nervous system, this forming the basis of different degrees of intelligence and psychic initiatives as we find these in different individuals. While thought and mental action cannot be spoken of as secre-

tions, as Cabanis claimed, thought is impossible and mental activity an absurdity apart from those nervous processes which have their basis in the chemical, physiological and vital changes taking place in the nerve cells. Here lies the secret of Osteopathic treatment by manipulation in the case of mental diseases, the manipulation being directed to the establishment of stability in the trophic conditions, adjusting the normal relations of cell with cell, preserving the integrity and unity of the nervous system and correcting any misplacements or maladjustments of bone, muscle. etc., that would interfere with neural irritability or conductivity, the blood circulation and other nutritive conditions necessary to neural integrity and continuity. By removing those abnormal processes and conditions that affect the nervous system, the nervous system is set free as the medium for the manifestation of mental activity and thus sanity may take the place of insanity.

The principle of auto-suggestion is not the principle of Osteopathy, although it may undoubtedly be utilized in dealing with purely mental conditions. Scientific suggestive therapy is undoubtedly a part of Osteopathy as it is of every rational system. But Osteopathy recognizes body diseases as well as mental diseases and it deals with these body diseases from a body or material standpoint. Osteopathic therapy is, therefore, material as well as psychic. Auto-suggestion has nothing to do with the therapy of body diseases, because Osteopathic treatment can be applied even where there is mental resistance. The *materia medica* is purely physiological and therefore material, without any relation to spiritualism or christian science in any form. In my own laboratory I have demonstrated that in cardiac conditions of failure or over activity it is not necessary to give a drug either to stimulate or lessen the heart action; for by the use of the sphygmograph, either the radial or carotid, or the cardiograph along with the recording kymograph we have shewn that the moment the fingers are placed upon the pneumogastric nerves the action of the heart is accelerated, and the moment that manipulation is applied to the superior cervical region controlling the sympathetic ganglia and nerves in connection with the heart, the action of the heart is lessened. Tracings of some of these experiments have been preserved in the case of both the normal and pathological heart. Diarrhœa and constipation have both been controlled and corrected by the manipulation of the nerves from the spinal cord regulating the secretory and peristaltic processes in the intestines. There seems to be an economy of nature in the capacity of the different nerves for stimulation; for example, the dilator fibers are more easily stimulated than the constrictor fibers in the vaso-motor system, the constrictors being the constantly active and the dilators the emergency fibers, the former representing the tendency to normalization in connection with the blood supply. Diarrhœa is produced by some mechanical irritation or obstruction, as for example, the contracted condition of the spinal muscles resulting in an irritable condition of the vaso-motor splanchnics to the visceral organs. The

result is that the mucous lining of the intestines becomes congested or inflammatory, associated with accelerated peristaltic action. The exciting cause from a physiological standpoint is the increased excitability of the vaso-motor nerves passing out of the spinal cord along the lower dorsal region. To remove this condition an inhibitory pressure is brought to bear upon the lower dorsal region along the spine so as to modify and normalize the peristalsis of the intestines and to regulate the blood supply, thus establishing nutritive order.

The curative standpoint of Osteopathy is nature's means to health. Health is associated with the harmonious action of all the different parts of the system, when these parts are free from irritation or disturbance from any cause, so that all the fluids, forces and substances essential to life are permitted to flow freely to every part of the body, uninterrupted by any stoppage, impingement, dislocation or displacement of any kind. The great law of life is harmony. Disharmony involves disease and leads to death. To remove this disharmony the Osteopath attempts to trace out and readjust the mechanical disorders that impede some of the normal functions, thereby enabling nature to return to her equilibrium and to give health to the patient. Most if not all diseases have a direct relation to some mechanical cause and the only cure for such a primary lesion is the mechanical correction of it. When the condition is complicated, as in many diseases, by the presence of micro-organic germs, we accept of the theory of Hueppe, in opposition to the Koch school, that specific diseases are not caused by specific germs. Disease represents a function, not of the germ, but of the animal that is diseased, the normal activity of the organic cells giving health and the abnormal activity of the organic cells giving disease. According to this, disease is the result of abnormal functional activity, resulting from, (1) certain external conditions, and (2) internal body conditions including the presence of the bacteria. Among the internal conditions we include the abnormalities already referred to which result in a malnutritional condition of certain organs of the body, this malnutritional condition furnishing the field for the bacterial deposit, development and feeding in the tissues. When there is an obstruction to the free fluid circulation and the free nerve current there is presented a culture field for these germs which begin to multiply and also to throw off toxic substances. Osteopathic therapeutics attempts to relieve the mechanical obstruction so as to prevent the germs from enjoying a field of culture and when cut off from this culture medium throws in a rich supply of fresh blood whose leucocytes become active in the destruction of the disease germs. Fresh blood, fresh lymph and fresh cerebro-spinal fluid represent three anti-septics furnished by nature for the use of the operator in dealing with micro-organisms; as well as forming a nutritive basis in restoring normal local nutrition. All inflammatory conditions represent primarily congestive conditions dependent on obstruction either of the arterial or venous circulation. The removal of the congestion

involves the removal of the mechanical cause of the obstruction to the circulation.

From a diagnostic standpoint Osteopathy aims to develop a new science of diagnosis in addition to the older methods of diagnosis by palpation, auscultation and percussion. This involves the idea of a refined and sensitive tactition. A complete knowledge of human anatomy, both normal and morbid, includes a knowledge of the system from the standpoint of educated touch, so that proper discrimination may be made between the normal and the abnormal. The fingers can certainly be delicately educated, to such an extent that in the blind there may be almost the vicarious substitution of touch for vision. The basis of this highly refined tactile education is found in the physiological structure and specialized activity of the minute nerve fibers and neuro-muscular organs in the fingers. At the basis of all the senses lies the essential principle of sensibility, so that in the education of the senses this sensibility may be acutely specialized. From the standpoint of objective diagnosis this educated tactile sensibility presents a new and most important diagnostic means. It represents the materializing principle of Osteopathic diagnosis, distinguished from the subjective diagnostic principle of symptomatology. Symptoms are always more or less exaggerated. A physical examination so far excels any subjective statement of the case that facts become the scientific basis of a true diagnosis. Part of the course in Osteopathic education is the training in this method of diagnosis by purely physical examination, so that the practitioner may be able to trace out on the normal body the outline of all the organs, the vertebral relations, skeletal articulations, etc. In the spinal cord there are localized subsidiary organic centers, centers of reflex action and subordinate centers, corresponding with the brain primary centers, so that in nervous disorders and diseases of a nervous origin or complication, the operator can reach those centers of vital activity in connection with the vital forces by manipulation along the spine. The object is to manipulate the nerve center and the nerve fiber as well as to correct any existing lesion, so that by physiological stimulation or inhibition neural harmony, neural trophicity and neural continuity of impulse may be established.

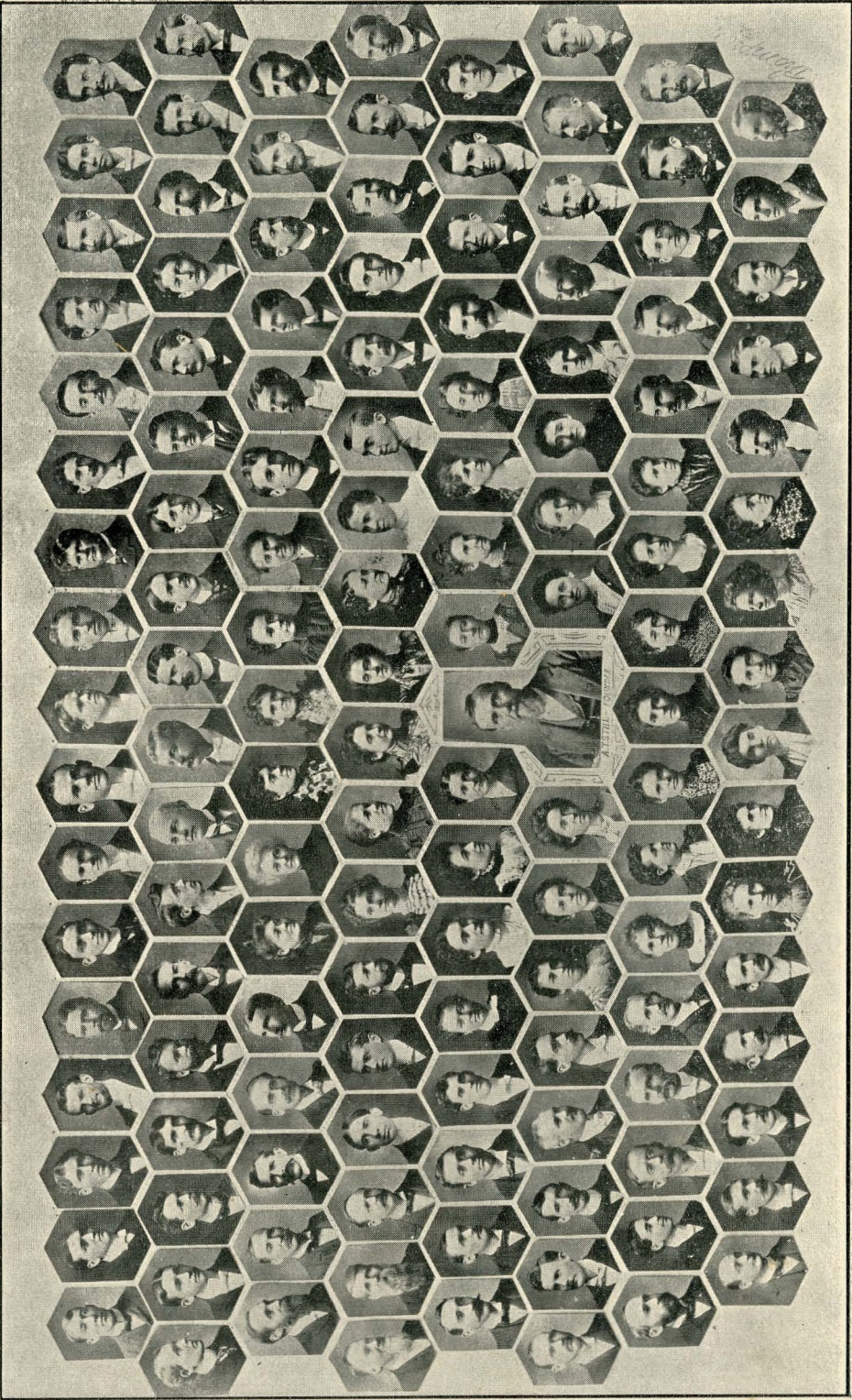
By this tactile diagnosis it is easy to detect an enlarged spleen, a dilated stomach, an impacted colon or a hypertrophied liver. Along the spine the fingers can detect contractures and tender spots that indicate congested conditions around the cord and spinal areas, the delicate manipulation of which will remove congestion and restore functional activity to the parts supplied by these nerves. In gynecology the educated finger is able to appreciate the most exact condition of the affected organs or parts, detecting enlargements, prolapsed conditions, lacerations, ulcerations, hypertrophied and tense or relaxed conditions of the sphincter muscles, sac-like dilatations accompanying catarrhal inflammation and the lack of tonicity along the walls of the excretory organs.

We cannot but think of that old adage as we look back over the history of medicine, "thinking is the least exerted privilege of cultivated humanity." Man is wedded to the opinions that are born in his being. And yet it is a wise provision, as the progressive spirit marches on, that science demands, first, the proof of the new to claim upon belief; and secondly, the declaration to mankind of what has been scientifically demonstrated. To be branded as novel does not imply that an idea is false. The blood circulated in the same way long centuries before Harvey explained the philosophy of its circulation. The human body has survived many changeable vicissitudes, involving disease, pestilence and death. If today we find that the body is interwoven by a meshwork of nerves, by means of which all the vital forces of the body are governed; if today we find that everywhere in the tissue structures of this body there are two great pathways of fluid circulation, by means of which the blood and lymph are carried to the most remote recesses of the organism, laden with nutrient materials for the nutrition of the tissues and bearing away the waste produced by the nutritional processes—it is not mere speculation to assert, when we know the nerves that direct and control and the vessels that supply with nutriment certain parts of the body, and when we know their functions, that these functions can be controlled more certainly by manipulation of the nerves and vessels, than by pouring into the stomach an uncertain quantity and potency of drugs. "Nature has certainly a wonderful power of putting things right in the end."

I have hope that the medical profession will be quick to receive, slow to dispute, on the basis of contradiction to old established customs, methods and theories, the claims of this new child of science. No class of men has been so quick to appreciate the good and yet no class of men has been so ready to dispute the presentation of thought or principle tending to overturn or interfere with the theories or dogmas of the profession. This has been largely due to the fact that scholastic jealousy has forced a medical etiquette upon the profession that regards with jealousy anything that appears as the product of a different school. But this old time jealousy and traditional reverence for antiquity is fast dying away. In the growth of science, in the progress of intellectual advancement, in the researches of the laboratory, loyalty to old established customs ceases to be a virtue; and he who delves deep into the mysteries of science realizes that foregone conclusions are unavailing, that truth presents the only open pathway to discovery and that loyalty to the right and the scientific, whether old or new, is the only principle of our modern times worth fighting for. May it be so that, when Osteopathy is unfolded to the scientific world and its principles are scientifically evolved and systematized, it may be quickly grasped and its principles patiently, persistently and clearly unfolded so as to increase the aggregate of human health and happiness. Till then, we who have already perceived and been able to appreciate the value of these principles must continue our researches in the field of human anatomy and physiology, in the clinical and laboratory investigation and practical demonstration, in the hope that every remote recess of the organism may be laid bare in such a way that no one may fail to see how the touch and presence of the educated hand can profoundly affect the entire functional wellbeing of the body organism.



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SPECIFIC OR GENERAL TREATMENT.

A. G. HILDRETH, D. O.

WHEN solicited by one of our brother members of the Atlas Club to give a talk upon some subject of interest to members of this organization, I asked if there was any particular line of thought he would suggest. His answer was "None." After standing and talking for a little time, he said to me, "By the way, Doctor, we would like very much your opinion upon specific or general treatment." I wished then, I had not spoken, for I believe I realize in a measure, at least, the magnitude of the subject suggested, and as a preface to the few remarks which I wish to make, I want to say that there is no supposition on my part that I shall be able to do justice to the occasion, and my only hope is that I may, in a very common way, be able to drop a few disconnected thoughts which will at some time be of value to you as practitioners of Osteopathy. There is not the least question in my mind, but what the above subject and its decision is one that will draw distinctly the line between genuine Osteopathic treatment, and the half to one hour treatment so generally administered by the quack Osteopaths all over this country to-day. In other words, it means the difference between a scientific treatment, scientifically applied, and the hit or miss treatment of the ignoramus who stands over his patient and rubs and twists, works and tugs away with no other thought in mind but to try and reach every single spot in the spine from one end to the other, with the hope that by his determined physical exertion he may make up, in part at least, for his ignorance of the case in hand. These people argue with themselves that by such a course they are proving to their patients their thoroughness and competence, as well as their liberality of time. What a shame that a profession that has already done so much for suffering humanity should have to contend not alone with external obstacles in its progress, but with internal ignorance as well! I mean by this that Osteopathy has ever had to combat ignorance, superstition, old schools, public sentiment and numerous other obstacles which have seemed determined to wreck the science that we love, and further that one of our greatest dangers has been from the incompetent within our own ranks by persons at least who professed to belong in our ranks. Men and women who are not Osteopaths at heart—who care nothing for the profession and almost as little for the sacred human lives with which they deal; people who seek notoriety and fortune at the expense of a profession, whose divinity of origin can only be doubted by those who are ignorant of the great good which is constantly being done through the proper application of its methods, are nothing but leeches who are sapping the very heart's blood of our profession. We are all well aware that all

schools whether medical, literary or scientific, are composed of all kinds of people. This fact has been fully demonstrated in our schools, and now we stand face to face with the problem of how best to demonstrate to the reasoning thinking masses the truth upon which our profession has laid the solid foundation upon which, in the future, must be builded the super-structure of our science. The durability, the magnificence and the lasting qualities of this edifice depend upon the simplicity of its presentation, the correctness of its application and the honest purpose of the men and women who compose the profession.

There is no broader avenue through which we can reach the people, then the results we obtain by a scientific application of our treatment. If the student who enters our schools could only realize fully the work before him and set himself to his task, not only to make his grades, but with a determination to master the subjects in hand. It has been truly said, "The greatest study of mankind is man." Knowing this to be true, let us as Osteopathic students, be determined to master this wonderful structure not alone in health but in disease—study it to be familiar with every bone, every ligament, every muscle, every vessel, every organ, every nerve and every nerve center and their functions. Demonstrate by your control of man that you understand his mechanism and that he only needs a master mechanic's guiding hand to produce health and perpetuate life. We are different from other professions who profess to cure the sick. We claim that disease cannot exist without a cause, and we are earnestly seeking that cause, without trying so hard to name an effect, and after finding the cause comes the question, how best to treat the same to get the best and quickest results, and now we reach direct the great bone of contention which is absorbing so much time; (*that is, it takes the time of some people.*) It does seem to me that it would take but the shortest possible time for a person who understands the anatomy and the physiological functions of the human body, the nerve centers and the control of the same to decide this question, and again the practical experience of those of us who have been constantly in the field of practice for a number of years would lead any competent Osteopath to throw up their hands in holy horror of him who gives on all occasions a general treatment and calls it Osteopathic.

Stop and let us study for a moment the mechanism of this structure with which we are dealing. On the first view we see the cerebro-spinal nerve force, composed of brain, the medulla and the spinal cord, or in other words, we see as Gray describes it, the nerve force of animal life surrounded by a living wall so perfect and strong that it gives to the most delicate structure of our bodies complete protection from the rough elements and obstacles with which we may come in contact—standing as it does within a pyramid of thirty-three segments, the brain at the top incased in an impregnable fortress. Look at it! Study it! With its twelve pairs of cranial nerves, passing out of the cranium through openings for exit so amply pro-

vided by nature, and thirty-one pairs of spinal nerves passing out from that living wall at the junction of each vertebra, coming from the spinal cord as they do by two roots, The anterior one laden with motor elements, and the posterior with sensory elements, both uniting before leaving the spinal canal, so that on emergency they are laden with both elements and distribute them to the living muscular wall which constitute the covering of this framework of ours.

Then, again, we see just anterior to this vertebral column another nervous system known as the sympathetic nervous system or as Gray describes it the nerve force of organic life. This gangliated cord extends from the base of the skull to the coccyx and is divided into three ganglia in cervical region, twelve in dorsal, four in lumbar, and four or five in sacral. They give off two kinds of nerve fibres, connecting and distributing. Your connection are fibres which connect one ganglia with another, also fibres which connect the ganglia with the spinal cord, and it is these latter nerve fibres or nerve roots, the *Rami Communicantes* that affords the avenues through which the Osteopath must work to reach organic life. They are the connecting link between the spinal cord and the sympathetic or between animal and organic life. Through these little connecting nerve roots are interchanged the substance of cerebro spinal nerve force, or they are the common avenues, if you will, through which are blended both nerve elements. The distributing branches are scattered throughout the viscera, and to the walls of the blood vessels. They unite to form three great gangliated plexes. The cardiac, the solar or epigastric and the hypogastric. These are the three great distributing centers, and remember the Osteopath must reach them by way of the spine. Of course we have other ganglia of microscopic size in certain viscera, as in the heart, stomach and the uterus which serve as additional centers for the origin of nerve fibres. Knowing the above to be facts, then let us remember this spinal column from an Osteopathic standpoint. Let us call it the electrical key board if you will, and the Osteopath the human telegrapher. Let us look again at the brain with its twelve pairs of nerves which are distributed to the face, the throat, the stomach and controlling the different special senses. We also find the medulla, with its vasa motor center, the spasm center, and the sweat center and others too numerous to mention. We also see the spinal cord and the column which surround the cord with their thirty-one pairs of nerves, and the sympathetic which lie just in front but contiguous to the spinal column with its twenty-or twenty-one pairs of ganglia. These spinal nerves come out of the spinal canal through the inter-vertebral foramen, giving off connecting and distributing branches in all directions. Posterior to the muscles of the back and anterior to the wall of the thorax and abdomen connecting with the sympathetic, thus you see at the junction of the vertebra a regular distributing center. Not only do these nerve trunks as they pass from the spinal cord possess motor and sensory nerve fibres, but they regulate the law of

have not been able to do. I have attributed this to the fact that they study the nervous system much more closely than we, and they are better able to adapt treatment to the different classes of diseases than we are. I think we all fall short in that matter. We do not study the nervous system sufficiently. Those of us who have practiced medicine twenty-five or thirty years accept the fact that diseases are *largely controlled or come from some spinal center* (italics ours), and I have to believe because I have seen the treatment given, and seen the people recover by getting at the nerve centers and removing the pressure. Of course, we know they don't claim to make a surgical operation; it may take some cases from the surgeon, because we often operate where possibly the trouble could be removed by certain manipulations, and if we understand these manipulations, we might save a great many patients that die, and I would not criticise the study under any consideration. While I haven't been able to make a study of it, yet I am confident it is something we must know, and no use to get our backs up, because they are the finest anatomists in the world. They are fine anatomists and physiologists; and I would hardly dare say much against it, because it is going to be a competitor right through, and the better we know it the better we will be able to combat it, if we choose to do so."

We study our anatomy and physiology with a different object in view, from the students of other schools. They study to understand the relation of structures, and the functions of the same, for the purpose of knowing the effect of drugs upon them and to know where and at what point to cut for surgical operations. We study our anatomy and physiology with the sole purpose in view of understanding the entire human structure as a natural organization. We study it as a natural law and depend upon our knowledge of that natural law to govern the same by understanding the nerve centers and their functions.

In our practice we are then largely dependent upon physical diagnosis, or our knowledge of the natural law with which we are dealing to locate or understand the cause of the diseases of the same. You cannot be too careful, you cannot take too much time, your patient will think a great deal more of you if you give yourself plenty of time in making your examination. Here is where you can be liberal with your time and you will find that you are never wasting it. I have had patients come to me before now that I have carefully watched for a week, yes, two weeks, or a month, before I would even give them an opinion. Your motto should be, "Never express an opinion until you know you are right." A careful, correct diagnosis, combined with a specific treatment applied properly, means everything for the future of our profession. A great deal has been said lately of scientific Osteopathy. A treatment becomes scientific only when it is correctly applied.

SOME REMARKABLE CASES.

Reported By the Operators of the A. T. Still Infirmary.

ELLEN BARRET LIGON.

IN selecting, for this report, from the thousands of cases treated and cured by Osteopathy, it was not intended to record any of the multitude of ordinary cases of gastric trouble, rheumatism, diseases of the liver, bronchitis, nervous conditions, asthma, insomnia, chronic diarrhoea and constipation, headache, etc., ad infinitum, but only such cases are given here, as were remarkable, either from the extent to which the disease had advanced or from the marvelous directness of the effect of Osteopathic correction following Osteopathic diagnosis. The varying length of time needed in different cases was of course dependent upon several things, for example, the amount of regeneration necessary, or the amount of manipulation necessary before the correction of the abnormalities which had caused the diseased condition. It is only the quack who professes to cure everything, or will guarantee always the same results, so it must be understood that other cases, which are, from a superficial diagnosis similar to these, may be incurable, by reason of some complicating condition peculiar to that individual case. But, as these were pronounced "hopeless" cases before coming here, they furnish at least a reasonable ground for hope that thousands of other so-called "hopeless" cases may be saved by Osteopathic methods.

From a great number of unusual cases the following have been selected:

REPORTED BY DR. C. E. STILL.

Case I. Valvular Heart Disease.

Mrs. Cornelia Walker was sent here to die of valvular heart disease. There was hypertrophy with incompetency of both the mitral and tricuspid valves. The lesion was a fourth dorsal vertebra lateral, to the left, interfering with the cardiac centres. A year's treatment entirely cured the case.

Case II. Mr. W. Intestinal Neuralgia.

Mr. W., after repeated treatments by various physicians, and after many visits to Hot Springs, Ark., from which place he returned each time only temporarily benefited, came here pronounced incurable. He described the pain as feeling like a red hot knife thrust through the abdomen. There were extensive reflex symptoms affecting the entire alimentary track. In his case there was a pronounced posterior condition of the second lumbar vertebra. It was connected at once, and in a few weeks the patient had entirely recovered, and in the two years since has had no return of the condition.

Case III. Dislocated Hip.

Mrs. C. came, a cripple in a plaster cast, having worn it for fourteen months and had been advised to continue to wear it for another fourteen months. Osteopathic examination revealed a dislocated hip. It was set at one treatment and the patient walked at once.

Case IV. Pulmonary Tuberculosis.

Mr. Soules, when examined, was found to have tuberculosis of the lungs, one lung being entirely gone. His father, mother and several brothers and sisters had died of tuberculosis. At the time of examination he weighed about a hundred pounds. Several ribs were found slipped at the vertebrae and interfering with vaso motor nerves to the lungs. The ribs were corrected, the patient recovered with but one lung and to-day is well, and strong.

Case V. Insanity.

Mr. S. had been kicked on the head by a mule. This accident was followed by insanity. The upper cervicals were found subluxated. They were replaced and the insanity disappeared.

Case VI. Major Epilepsy.

Master E. had been subject to epileptic seizures since his extreme youth, the attacks having begun so early, as to result in imbecility. There were found cervical subluxations dating from birth. These being corrected the disease disappeared and the mental condition has steadily improved, there having been no return of the attacks in over four years.

Cese VII. Partial Blindness, Atrophy of Optic Nerve.

Young man, age 19, in 1893, was affected with blindness which was partial all the time, and several times he was totally blind for three or four hours. He had been this way for about nineteen months, and had consulted some of the best oculists in the United States but gradually grew worse. Finally the physicians said no more could be done.

I treated him for thirty days Osteopathically, finding the atlas and axis deranged posteriorly enough to interfere with the nutrition to the optic nerve. He made rapid recovery, and after three months from time of treatment had entirely recovered, and has had no more trouble whatever with the eye. The treatment given was over six years ago.

REPORTED BY DR. H. M. STILL.

Case I. Diagnosed as Tumor.

Mrs. R's case had been diagnosed as tumor by the physicians before she came for Osteopathic treatment. The abdomen was greatly enlarged, and for three years there had been a discharge of pus through the rectum. An examination showed three of the lower ribs on the right side down and overlapping. The ribs were replaced, and at the end of three months all trace of disease had disappeared.

(Dr. Harry Still pronounces this the most remarkable cure that he has ever made.)

Case II. Miss C. Dislocated Hip.

In this case the dislocation of the hip dated from childhood and was the result of an attack of cerebro-spinal meningitis. The case was further complicated by a bad lateral curvature. In this instance it took twenty-five months treatment to so overcome the contractures of such long standing, so as to make it possible to reduce the dislocation, and straighten the curvature. But at the end of twenty-five months both results had been accomplished. Before the long unused muscles had regained their strength this same patient received a fall by which two vertebrae were so dislocated as to cause paralysis from the neck down. The dislocated vertebrae were replaced and in ten days the patient was able to be up.

(This case is quoted as illustrative of the patience sometimes necessary on the part of both patient and doctor to attain desired results.)

Case III. Gall-stones.

The patient, Mrs. —, aged fifty-five, was violently ill when first seen, having been brought on a cot. She suffered such constant pain as to necessitate the use of morphine under her former practitioner. Her skin showed the deep sufferer of jaundice, and the case had been so diagnosed. After sixteen days treatment there was passed a gall-stone of phenomenal size. The passage of this was followed by many smaller ones. At the end of a month the patient went home well. The most marked anatomical lesions was a seventh dorsal, lateral to the right.

Case IV. Rheumatoid Arthritis.

Mrs. —, when first seen, could move no joint in the body. The only movable part was the eyelids. The case was at first declined being apparently hopeless, but was finally taken under protest.

At the end of two months the patient could begin to move the neck a little. At the end of four years treatment the patient can do very nearly what any one else can, except walk. All the apparent ankylosis has yielded to treatment, except hip joint. The beginning of the trouble dated back to child-birth and blood-poisoning at that time. After that there was a surgical operation for a supposed trouble which did not exist. There were various lesions along the entire length of the spinal column.

Case V. Bright's Disease.

Mr. B's examination revealed unmistakable Bright's disease. The urinalysis showed both albumen and casts, there was constant pain in the lumbar region, constipation and headaches. Three months treatment cured the patient. This was in '97 and the patient's health continues good. The 7th and 8th dorsal vertebrae were lateral and posterior.

Case VI. Penman's Paralysis.

When the patient was first seen it was almost impossible for him to

approximate the thumb and index finger, the hand being entirely useless. In five weeks he could scratch his head, in two months he could write his name, and in four months he resumed his work. The sixth cervical was unusually posterior, and was thus affecting the brachial plexus.

Case VII. Functional Heart Trouble.

Mrs. —, after a severe attack of grippe in 1890, began to decline in health. During the following summer she had an attack of inflammation of the liver. After this there began to appear symptoms of impaired heart action, so reducing the nervous vitality of the stomach as to almost entirely destroy the digestive powers. She was in such constant danger of syncope that the physicians advised her to keep nitroglycerine tablets under her pillow if in bed, or in her glove if she went out of the house. The attacks of heart failure were alarming. When the patient came here in '97 she had tried various mineral springs, mountain air, many doctors and was a walking apothecary shop. At that time she weighed a hundred and sixteen pounds, when her former weight had been one hundred and fifty, and she could eat nothing but malted milk. At the end of six weeks she began to improve and at the end of three months was discharged cured. The 2nd and 5th ribs on the left were down, the lower ribs on both sides down, the 7th, 8th and 9th dorsal vertebræ to the left. There was also a right lateral subluxation of the 2nd and 3d cervical.

REPORTED BY DR. A. G. HILDRETH.

Case I. Periostitis.

Mrs. G's—case had been pronounced as periostitis. When first seen there was an abscess on the radius. There had been an operation performed removing a large part of this bone. There was a constant burning pain from the back of the neck to the end of that arm. Amputation had been pronounced necessary. The only apparent Osteopathic lesion was a tightening of the tissues about the 1st and 2d vertebræ. By treatment directed to stimulation of brachial plexus, and blood supply to the arm, at the end of one month the inflammation had somewhat subsided. After six months the arm was well—the patient's health perfect.

Case II. Fatty Degeneration of the Heart.

Mr. K—from Madison, Iowa, came with what had been diagnosed as fatty degeneration of the heart—and the case was pronounced incurable. I advised him after examination to go home, the case seeming hopeless. But grasping at a last straw, he insisted on being treated. The subluxation of the 4th and 5th ribs on the left was the interfering cause. The correction of the anatomical trouble was followed by the recovery of the patient, and after two months the patient was dismissed cured.

Case III. Orchitis and Atrophy of the Testicle.

Two cases affecting the same organ and with the trouble found at the

same place, and both cured by the correction of that lesion, will be of suggestive value to the Osteopathic physician. Mr. A—I found suffering from, the testicle greatly swollen. The correction of a lesion between the 10th and 11th dorsal vertebræ, was followed in five minutes by relief to the patient. In Mr. B's—case the condition was a chronic one and I found a testicle partially atrophied. The correction of a lesion at the same place, was followed, in his case, by complete restitution.

Case IV. Chronic Ulceration of Bowels.

Mr. M.—was seized with violent cramping. The case was pronounced lead poisoning. The severe attacks of cramping continued, and after an interval were followed by an inflammatory condition of the intestines. There would more than twenty discharges from the bowels in twenty-four hours—the greater part being what appeared to be blood, mucus and pus. Mr. M.—tried many different physicians and many localities but grew steadily worse. Unable to work and extremely emaciated, he came here on July 29th. The examination located the trouble at the 1st and 2d lumbar—posterior and lateral. These were corrected, and by Sept. 1st, the patient had gained forty pounds, and declared himself well. In the three years since his recovery there has been no trace of a return of the diseased condition.

REPORTED BY DR. CARL P. M'CONNELL.

Circular Insanity. Case I.

A young lady, single, age 25, had been mentally deranged for five years and had consulted the most eminent specialists of the United States to no avail.

There were regular recurring periods of mental exaltation, depression and sanity. At two different periods there was suicidal impulses. The patient's general health was fair. After nine months continuous Osteopathic treatment the case was pronounced cured; and for the past two years the individual has enjoyed good health. The Osteopathic causative lesions were an anterior atlas and axis, and a right lateral lesion from 2d dorsal to 7th. The muscles along both sides of the spinal column were very rigid.

Case II. Migraine—Sick Headache.

A lady 30 years of age, had suffered from monthly periodical attacks of sick headache for ten years. The pain was in the left temporal region and paroxysmal in nature. Accompanying this was nausea, sometimes vomiting, and temporary disturbances of the eyesight. The lesions presented were a left lateral sub-laxation of the atlas and a slight derangement of the left articulation of the inferior maxillary.

Treatment was continued for three months when the anatomical lesions were corrected. At this period the headaches were less in frequency and not so severe as formerly. Following this period of treatment the patient took no more treatment for two months, and since that time (5 months

from beginning treatment) patient has not suffered from the attacks. The person now being free from migraine for 18 months.

Case III. Backward Displacement of the Uterus with Adhesions.

A lady 50 years old had been troubled with backward displacement of uterus for years, causing painful menstruation. The irritation was so great that finally inflammation of the tissues about the uterus occurred, resulting in adhesions of the back of the uterus and thus holding the uterus in that abnormal position. After (5) months treatment to correct the posterior lumbar region and local treatment to break up adhesions the case was fully cured.

Case IV. Painful Menstruation.

A girl 17 years of age had been troubled with painful menses for two years (ever since beginning of menstruation) The causative lesions presented were simply an innominatum tipped downward and forward, resulting in disturbance of the innervation of the uterus; and thus causing obstructed dysmenorrhea by the irritation of the circular fibers of the uterus. After two weeks treatment the girl was fully relieved.

REPORTED BY DR. MARION CLARK.

Case I. Convulsions.

Little Miss F—was subject to convulsions, the attacks always coming on at night, preceded by headaches and lasting sometimes for days. The condition seems to have been congenital. In her case all the lesions were of the cervical vertebræ. Five months treatment corrected the lesions and the attacks disappeared. The patient has not had a return for seven months.

Case II. Sciatic Rheumatism.

Mr. M—was so lame, from what had been diagnosed as sciatic rheumatism, that he could not walk over a block. The trouble all came from a displaced innominate. This was replaced and at the end of the month the case was dismissed cured.

Case III. Chronic Gastritis.

Mr.—came here from Battle Creek, Michigan, after a year's treatment in the sanitarium there. When he came lavage was necessary, the stomach being washed out daily. There was a lateral displacement from the 5th to the 9th dorsal. The case was cured in three months.

REPORTED BY DR. C. L. RIDER.

Case I. Nervous Prostration (From a Lightning Stroke).

Mr. L—was rendered unconscious by lightning for several days, lightning having struck a wire fence near him. Memory and sight were both affected, and nervous system shattered. Patient was almost prostrated from nervousness. At the time of the stroke he fell, and by the fall the cervical vertebræ was thrown out of line from the atlas to first dorsal. There was marked contracture of the cervical muscles. Three months treatment cured him entirely.

Case II. Hemorrhages from Bowel.

Mr. E—suffered with chronic hemorrhages from bowels, was emaciated, nervous, jaundiced and in bad shape generally. On examination lesions was discovered in middle dorsal region. After two months treatment he was cured.

Case III. Chronic Rheumatic Conditions.

Little Lizzie K—was afflicted from chronic rheumatism as to be helpless. Both legs were flexed at right angles on the thighs and drawn back. The arms were flexed so that the hand could not reach the mouth. Impossible to straighten the arms. There seemed no marked lesion—the liver and kidneys being the primary cause, there being albumen in the urine. Until the last two weeks the patient had not walked. She now goes on crutches, the hand will reach the mouth, the albumen is disappearing from the urine, and the patient is fairly on the road to recovery.

These are but a few of the astounding results obtained by the new method of treating disease, that is—removing the cause, or correcting the cause instead of treating the symptoms. No mention has been made here of such well known cases as the cure of Mrs. DeLendrecie of cancer of the heart, or of Mrs. Springer, of gall stones, and many other cures that have been before quoted in the JOURNAL.

A. S. O. GLEE AND MANDOLIN CLUBS.

Graduates and friends of the school will be pleased to know that the lethargy which seemed to exist in all musical circles of the school at the close of the last scholastic year was only a transient condition. The Glee Club of 1899-1900 is at work under more favorable conditions and with fully as good material as during any term of the school's existence.

Under the leadership of President H. M. Vastine and the Musical Direction of Prof. J. W. Forquer a large number of men have been brought out and trained for chorus and solo work.

The personnel of the club is as follows:

FIRST TENORS.

Prof. J. W. Forquer, Musical Director, a graduate of the Gottschalk Lyric Conservatory, of Chicago; H. B. Sullivan, Brooklyn, N. Y.; T. E. Regan, of Lincoln, Neb.; H. K. Bennison, of Kirksville; Eugene Pitts, of Beatrice, Neb.; T. E. Bryan, of Paris, Mo.

SECOND TENORS.

Ernest Sisson of Genoa, Ill.; S. J. T. Novinger, of Kirksville, Mo.; D. Hulett, of Manhattan, Kansas; T. E. Gamble, of Wayne, Neb.; J. T. Walker, of Kansas City, Mo.

BARITONES.

Frank H. Smith, of Bloomington, Indiana; W. Allen Gravett, of Graysville, Ill.; P. L. Hodges, of Sidney, Iowa; E. L. Longpre, of Momence, Ill., F. J. Fassett,

of Montpelier, Vt.

BASSES.

H. M. Vastine, of Sunbury, Pa.; Asa M. Willard, of Kirksville, Mo.

Among others of these organizations we may mention the '99 Club and Orchestra and the choir of the Cumberland Presbyterian church.

Richard Wanless, of Kansas City, Mo., is Secretary of the Club.

W. E. Dwiggins, of Rossville, Ill., was formerly of the choir of the First Baptist church of Kirksville.

H. H. Smith, of Wayne, Iowa, taught music and acted as Musical Director of the Glee Club, in Howes' Academy at Mt. Pleasant, Iowa.

Dr. Marion E. Clark, of the Faculty of the A. S. O., sang with the Club and played in the Orchestra of '99, and this year plays in the Mandolin Club.

Lee Dameron, of McFarland, Kansas, has played in an Orchestra previous to coming here.

E. D. Jones, of Plano, Iowa, was a member of the Mandolin Club of the Central University of Iowa.

A concert will be given in the Opera House in Kirksville, Monday January 29th.

The Club will be assisted in this concert by H. L. Chiles, a comic reader, from Louisa, Va., and Edward Herbst, Pianist, of Buffalo, N. Y.

Miss Florence Brown Stafford will act as accompanist.

JOURNAL OF OSTEOPATHY.

The Journal of Osteopathy.

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with all its contents, is fully protected by copyright

The facilities of the Infirmary for taking care of a large clinic practice were never better, and it is requested that the graduates in the field send as many cases of this kind as they can to the Infirmary.

* * *

Mrs. Nettie Bolles, of Denver, Colo., one of the first graduates of the A. S. O., spent a few days lately visiting Dr. A. T. Still and family. Dr. Bolles held the position of instructor in anatomy in the school after her graduation, and was also editor of the *Journal of Osteopathy*.

* * *

The call issued by the St. Louis organization of Osteopaths for a meeting to organize a State branch of the A. A. A. O. on Jan. 6, 1900, was responded to by a number of Osteopaths. They met at the office of W. H. Eckert in Commercial Building and organized by electing Dr. Eckert chairman, and Dr. E. P. Smith of Mermod & Jaccard Building, Secretary. There not being many present it was decided to postpone permanent organization to later date in hopes of securing a larger attendance. They adjourned to meet again June 27th, 1900 at Kirksville, Mo., at which time and place it is to be hoped every Osteopath in the state will be present. Missouri the home of Osteopathy should certainly have one of the best if not the very best and strongest organization in this union—let everybody come.

* * *

The first number of the "Journal of the Science of Osteopathy" is being prepared for publication in February. It will be a scientific Journal of a strictly scientific nature. It will represent the science of

Osteopathy and will not take any account of anything outside the field of science. We believe there is a field for such a periodical as there is no strictly and exclusively scientific journal devoted to the science. We do not intend to take the field already occupied so well by any of the popular and school journals. There is a demand expressed by the profession for a Journal whose aim will be exclusively to formulate the principles and attempt to prove what is scientific so that the scientific principles of Osteopathy may be put in such form as to be at once available to the profession and to scientific men in the medical profession in general. When new truth presents itself two things are demanded of its believers: (1) to prove that it is true, (2) to disseminate the knowledge of the true when proved and also the proof of its truth. These are the two purposes in view in starting this scientific journal. The Journal will be published at present bi-monthly and during the year 1900 250 pages of reading matter are guaranteed. If the subscription list increases the journal will be enlarged and made monthly before the end of the year. The subscription price for the year is \$2.50. The editor asks you personally to chronicle the results of your experience and send scientific contributions. Important clinic reports are solicited, giving a brief history of the case, a scientific diagnosis and the scientific and successful treatment. Contributions have already been promised for series of articles on the technique, principles of Osteopathy and many special topics in diagnosis, surgery, obstetrics, etc. J. Martin Littlejohn is Editor, 303 S. Maine St., Kirksville, Mo.

* * *
Y. M. C. A.

Officers for the coming term were elected Jan. 7, as follows:

President.....Fred J. Fassett, June '00
Vice-President....G. W. Reed, Feb. '01
Secretary.....B. W. Sweet, June '01
Cor. Secretary..F. P. Willard, June '00
Treasurer....Harrison Putnam, June '00

The next entertainment of the Lecture Course will be the lecture by Ex-Governor Taylor, of Tennessee, Thursday evening, Jan. 25.

CLASS DAY AND COMMENCEMENT EXERCISES.

SUNDAY, JANUARY 23,

11 A. M.

Baccalaureate Sermon,

Rev. Charles L. Stafford, of Muscatine, Ia.

TUESDAY, JANUARY 30.

2 P. M.

Class Day.

Music, "LeDiadem," - - - A. S. O. Orchestra
 Class Poem, - - - Stephen Woodhull
 Music, "On Gallant Company," A. S. O. Glee Club
 Class History, - - - Francis A. Eaton
 Reading, "The Dream of Aldarin," Edna Clair
 Cheatham
 Music, "Independencia," - - - A. S. O. Orchestra
 Class Prophecy, - - - Minnie E Dawson
 Solo, "Scene and Prayer," (Freischütz)
 Florence Brown Stafford
 Address, Class Representative,
 J. Martin Littlejohn. Ph. D., LL. D., F. R.
 S. L., F. S. Sc., (London.)
 Music, Selected, - - - A. S. O. Orchestra

TUESDAY, JANUARY 30,

7:30 P. M.

President's Address, - - Andrew Taylor Still,
 President A. S. O.

WEDNESDAY, JANUARY 31,

7:30 P. M.

Commencement Exercises.

Music, - - - Schubert Mandolin Orchestra,
 Ottumwa, Ia.
 Invocation, - - - Rev. W. L. Darby
 Music, - - - Schubert Mandolin Orchestra
 Address for Faculty, - Charles W. Proctor, Ph. D.
 Music, - - - Schubert Mandolin Orchestra
 Presentation of Diplomas,
 President Andrew Taylor Still
 Music, - - - Schubert Mandolin Orchestra

OFFICERS.

President, Charles W. Proctor, Ph. D.
 Class Representative, J. Martin Littlejohn.
 Ph. D. LL. D., F. R. S. L., F. S. Sc. (London.)
 Vice-President, Asa M. Willard.
 Secretary, Roy R. Elmore
 Treasurer, Harry M. Vastine.

NAMES OF GRADUATES.

Allen, Bertha
 Allabach, Lazarus
 Albright, Bert
 Arthaud, D
 Arnold, D Rippy
 Bynum, H R
 Beall, Isaac M
 Barker, Mrs Nannie T
 Braden, A E
 Blanchard, S W
 Browder, U M
 Baughman, J S
 Boyles, Louis G
 Canfield, C B
 Chappell, Miss Minerva
 Chaffee, George D, Jr
 Carter, Chas
 Clark, Wm
 Collins, Annie E
 Conner, R W
 Cheatham, W E
 DeFrance, Josephine
 Deeming, Wm J
 Dugan, R C
 Dawson, Minnie E
 Dickson, J Homer
 Dickson, Mrs E Rhinehart
 Eaton, F A
 Elliott, W E
 Edmunds, Bessie
 Elmore, R R
 Ellis, Mrs Sue E
 Ewing, Homer V
 Frey, Julia V

Mooring, Miss Cordele R
 Mahaffy, Mrs Clara
 Markey, Mary L
 Marshall, Lewis D M D
 Meeks, Geo Pearl
 Mansfield, Bernard R
 Mills, Williams S
 Minear, A N
 Morrey, Miss Cordelia
 Moyer, Mrs Adella
 Mullins, M W
 Musick, Mrs J R
 McAlpin, D E
 McClelland, Mrs Bessie B
 McMurray, Ida M
 May, Mrs Ella B
 McNeill, Agnes
 Novinger, S J T
 Overfelt, Louis B
 Paul, Arthur H
 Parcells, M L
 Powell, R B
 Powell, Mrs Anna H
 Polley, A A
 Proctor, Chas W
 Polley, Mabel
 Propst, Zeri Z
 Rhotehamel, Mrs C
 Roberts, Wallace
 Rightemour, S R
 Rogers, Cecil R
 Riley, B F
 Roberts, Benj P
 Scobee, I E

Graham, Geo E
 Graves, Murray
 Goben, C L
 Gilmour, James R
 Greene, W D
 Greene, Mrs Emile
 Harris, Wilfred Aylesforth
 Halladay, R S
 Harding, W C
 Holgate, T C
 Henderson, Pearl
 Hamilton, Lulu B
 Hartford, Washington I
 Hoard, Mrs Mary
 Ilgenfritz, Melvin
 Ilgenfritz, Mrs Rowena
 Ilgenfritz, Miss Gertrude
 Jones, W H
 Kennedy, Harry L
 Keyes, William J
 Keyes, Mrs Wm J
 Kellogg, S M
 Kinsinger, J B
 Kjerner, Samuel H
 Knox, Edgar M
 Littlejohn, J Martin
 Littlejohn, David
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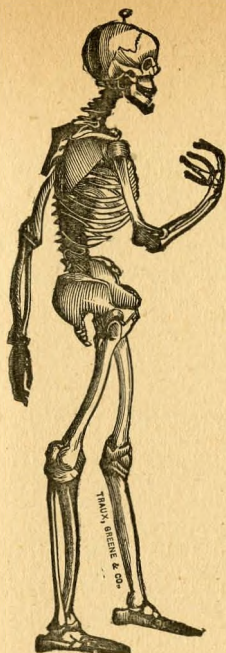
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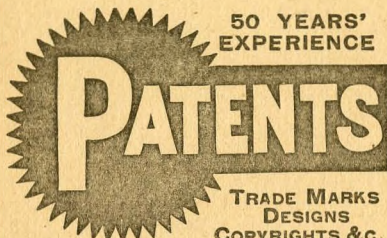
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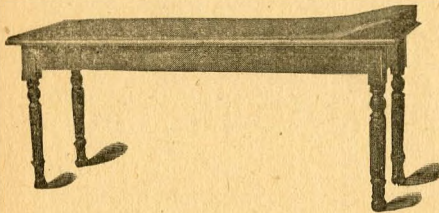
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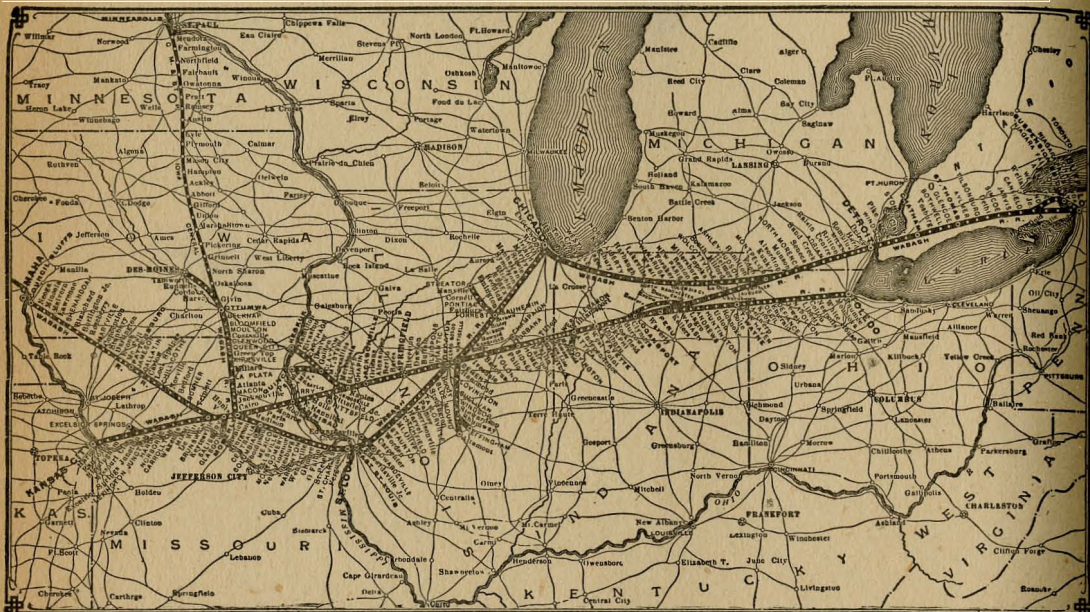
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